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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/656,086	09/05/2003	Yong-Chul Park	50736/DBP/Y35	9934		
23363	7590 11/22/2005		EXAMINER			
CHRISTIE, PARKER & HALE, LLP			WEINER, LAURA S			
PO BOX 706	58 CA 91109-7068		ART UNIT PAPER NUM			
11011221	,, 6.1 71107 7000		1745			
			DATE MAILED: 11/22/200	DATE MAILED: 11/22/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

		A	pplication No.		Applicant(s)		
		10	0/656,086		PARK ET AL.		
Office Action Summary			kaminer		Art Unit		
		La	ura S. Weiner		1745	,	
The Period for Rep	MAILING DATE of this commun ly	ication appear	s on the cover s	heet with the c	orrespondence a	ddress	
A SHORTE WHICHEVE - Extensions of after SIX (6) N - If NO period fi - Failure to repi Any reply reco	NED STATUTORY PERIOD F ER IS LONGER, FROM THE N time may be available under the provisions NONTHS from the mailing date of this comr or reply is specified above, the maximum st y within the set or extended period for reply sived by the Office later than three months: term adjustment. See 37 CFR 1.704(b).	MAILING DATE s of 37 CFR 1.136(a). nunication. latutory period will ap will, by statute, caus	OF THIS COM In no event, howeve only and will expire SIX se the application to be	IMUNICATION r, may a reply be tim ( (6) MONTHS from the ecome ABANDONED	l. ely filed the mailing date of this O (35 U.S.C. § 133).		
Status							
2a)☐ This a 3)☐ Since	onsive to communication(s) file action is FINAL.  this application is in condition in accordance with the praction.	2b)⊡ This act for allowance	tion is non-final. except for form	al matters, pro		e merits is	
Disposition of	Claims						
4a) Of 5)	i(s) 1-34 is/are pending in the action is fall the above claim(s) is/are allowed. i(s) is/are allowed. i(s) is/are rejected. i(s) is/are objected to. i(s) 1-34 are subject to restrictions	re withdrawn f					
Application Pa —	•						
10)∭ The di Applic Repla	pecification is objected to by the rawing(s) filed on is/are ant may not request that any objectment drawing sheet(s) including ath or declaration is objected to	: a) ☐ accepte ction to the drav g the correction i	ving(s) be held in is required if the c	abeyance. See drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 C	` '	
Priority under	35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
2)  Notice of Dra  3)  Information [	erences Cited (PTO-892) ftsperson's Patent Drawing Review (F Disclosure Statement(s) (PTO-1449 or Mail Date		9a 5) <u> </u>	erview Summary ( per No(s)/Mail Da otice of Informal Pa her:	(PTO-413) te atent Application (PT	<sup>-</sup> O-152)	
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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-19, 31-34, drawn to a lithium battery and an electrolyte for a lithium battery comprising an additive, classified in class 429, subclass 307.
  - Claims 20-26, drawn to an electrolyte comprising an additive and a poly(ester)(meth)acrylate, classified in class 429, subclass 309.
  - III. Claims 27-30, drawn to a method for preparing an electrolyte, classified in class 429, subclass 188.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated because they are not disclosed as capable of use together and have different functions and different effects such that Group I requires specific sulfone-based compounds, a specific azo compound, 2,2'-azobisisobutronitrile and specific organic solvents which is not required by Group II and Group II requires specific (polyester)polyol, (meth)acrylic esters and specific groups having no radical reactivity.

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3. Inventions I, II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process as claimed can be used to make other and materially different product such as for a capacitor.

- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 5. This application contains claims directed to the following patentably distinct species of the claimed invention:

If pick Group I:

- A) choose the sulfone-based compound as Formula 1, Formula 2 or Formula 3.
- B) choose 1) a C3-C30 organic peroxide (choose specific compound from claim 7) or 2) an azo-based compound (specifically claim 8).
- C) choose the organic solvent to be:
- 1) carbonates (claims 12-13) or
- 2) esters (claim 12) or
- 3) ethers (claim 12) or
- 4) ketones (claim 12) or 5) a mixed solvent of cyclic carbonate and a chain carbonate (claim 14) or
- 6) mixed solvent of carbonate and an aromatic hydrocarbon (claims 15-17) (choose

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specifically from claim 17) or

7) a mixed solvent of EC and a carbonate having a lower boiling point (claim 19).

If pick Group II:

A) pick from claim 22

B) pick from claim 23

C) pick from claims 24-25.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 5-6, 10-11, 20-21, 26-34 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. A telephone call was not made due to the complexity to request an oral election to the above restriction requirement, therefore an election has not been made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura S Weiner
Primary Examiner
Art Unit 1745

November 17, 2005